

### **REMARKS**

Claims 3, 8-10, 12-16, 18-20, 22-23 and 25-26 have been amended. Support for the amendments can be found throughout the specification. No new matter has been added. Claim 17 has been cancelled. New claims 27 and 28 have been added. Support for the new claims can be found in the originally filed claims.

Applicants thank the Examiner for the telephonic interview on April 23, 2008, during which Applicants and the Examiner discussed proposed amendments to the claims. Following the telephonic interview, Applicants filed a Supplemental Response and an Interview Summary on April 29, 2008. For the Examiner's convenience, a copy of the Supplemental Response and Interview Summary is attached to this response at Attachment A.

Applicants thank the Examiner for withdrawing previous rejections of claim 1 and 2. Applicants also thank the Examiner for withdrawing the previous rejection of claim 13 under 35 U.S.C. § 101 and the previous rejection of claims 18-25 under 35 U.S.C. § 112, second paragraph.

Claims 3, 8-10, 12-16 and 18-28 are pending.

### **CLAIM REJECTIONS**

#### ***Rejection under 35 U.S.C. § 101***

The Examiner has maintained the rejection of claims 1-3, 8-10, 12-17 and 26 under 35 U.S.C. § 101 as being "directed to non-statutory subject matter." See Office Action at p. 2. Claims 8-10, 12-17 and 26 depend from independent claim 3.

Claim 3 relates to a pharmaceutical composition including isolated  $10^4$  to  $10^{10}$  killed whole cells of a bacterium and a pharmaceutically acceptable carrier, diluent or excipient. Applicants respectfully submit that claim 3 does not read on naturally occurring bacteria. Applicants respectfully request the withdrawal of this rejection with respect to claim 3 and claims dependent therefrom.

***Rejection under 35 U.S.C. § 102(b)***

The Examiner has maintained the rejection of claims 3 and 8-10 under 35 U.S.C. § 102(b) as being unpatentable over U.S. Patent No 4,599,310 to Matson et al. ("Matson"). See Office Action at p. 4. Claims 8-10 depend from independent claim 3.

Claim 3 relates to a pharmaceutical composition that includes isolated  $10^4$  to  $10^{10}$  killed whole cells of a bacterium selected from the genera *Rhodococcus*, *Gordonia*, *Dietzia*, *Tsukamurella* and *Nocardioides* and a pharmaceutically acceptable carrier, diluent or excipient, which pharmaceutical composition in use modifies a cellular immune response.

Matson describes an antibiotic (sandramycin) produced by fermentation of a *Nocardioides* strain and further describes purifying sandramycin and the uses of this purified antibiotic. See col. 2, lines 58-60, col. 7, line 41 to col. 8, line 64, and col. 10, line 62 to col. 12, line 25. Matson describes cultivating cells for the production of an antibiotic. See col. 1, line 6 to col. 7, line 40. To extract the antibiotic, Matson describes that "[r]aw fermentation whole broth (~ 8 liters) was transferred to a 20-liter tank ..." and "[a]n equal volume of ethyl acetate was added." See col. 13, lines 25- 29 and flow chart depicting isolation of the antibiotic in cols. 7-8. Matson does not describe a pharmaceutical composition that includes isolated  $10^4$  to  $10^{10}$  killed whole cells of a bacterium selected from the genera *Rhodococcus*, *Gordonia*, *Dietzia*, *Tsukamurella* and *Nocardioides* and a pharmaceutically acceptable carrier, diluent or excipient, which pharmaceutical composition in use modifies a cellular immune response.

Accordingly, independent claim 3 is not anticipated by Matson. Claims 8-10 depend from claim 3 and are also not anticipated by Matson for at least the reasons described above. Applicants respectfully request reconsideration and withdrawal of this rejection.

***Rejection under 35 U.S.C. § 112***

The Examiner has rejected claims 18-25 under 35 U.S.C. § 112, second paragraph for being indefinite "for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention." See Office Action at p. 5. Claims 20-22 depend from independent claim 18 and claims 23-25 depend from independent claim 19. In an effort to expedite prosecution and not in acquiescence to any rejection, Applicants have amended claims 18 and 19.

Claim 18 relates to a method for treating or preventing a condition in a subject including administering an effective amount of a composition including  $10^4$  to  $10^{10}$  killed whole cells of a bacterium selected from the genera *Rhodococcus*, *Gordonia*, *Dietzia*, *Tsukamurella* and *Nocardioides* and a pharmaceutically acceptable carrier, diluent or excipient, which composition in use modifies a cellular immune response. Claim 19 relates to a method for immunizing a subject including administering a composition including  $10^4$  to  $10^{10}$  killed whole cells of a bacterium selected from the genera *Rhodococcus*, *Gordonia*, *Dietzia*, *Tsukamurella* and *Nocardioides* and a pharmaceutically acceptable carrier, diluent or excipient, which composition in use modifies a cellular immune response.

Applicants respectfully request the withdrawal of this rejection with respect to claims 18 and 19 and claims dependent therefrom.

The Examiner has also rejected claims 8-10, 12-17 and 26 under 35 U.S.C. § 112, second paragraph for insufficient antecedent basis. See Office Action at p. 5. Claim 17 has been cancelled thus rendering this rejection moot with respect to this claim. Claims 8-10, 12-16 and 26 have been amended to provide correct antecedent basis. Applicants respectfully request the withdrawal of this rejection.

### CONCLUSION

For the foregoing reasons, Applicants respectfully request reconsideration and withdrawal of the pending rejections. Applicants believe that the claims now pending are in condition for allowance. Should any further fees be required by the present Amendment, the Commissioner is hereby authorized to charge Deposit Account **19-4293**.

Respectfully submitted,

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**Customer No. 27890**  
Steptoe & Johnson LLP  
1330 Connecticut Avenue, NW  
Washington, DC 20036-1795  
Phone: 202-429-6748  
Fax: 202-429-3902

Harold H. Fox  
Reg. No. 41,498